Birds of Mount Compass District, South Australia.

By Edwin Ashby, F.L.S., &c., Wittunga, Blackwood, South Australia.

We have for a long time intended to make the Mount Compass district the objective of a two-days' collecting trip. In the past, at most, all the collecting we have been able to do in this locality was to step off for an hour or so when travelling by motor from Port Victor to Adelaide.

On the day following Christmas Day last Messrs F. E. Parsons, J. N. M'Gilp, and the writer made an early start for this locality, slept under some sheltering pines, and returned the following

afternoon.

The Mount Compass district is one of wide peaty swamps, between scattered hills, with a sandy surface soil, and largely covered with low bushes—Hill Oak, Tea-tree, &c.; the whole area being at a very considerable altitude, and very cold and wet in winter.

The S.A. Museum records show that from time to time rare birds were sent down from this district to the Museum more

than 30 years ago.

On reaching the small township of Mount Compass we made arrangements for our meals and started off across a mile or so of swamp, which, owing to the unusually dry season, was now only swampy in places. Mirafra javanica secunda (Sharpe), Lesser Bush-Lark, were numerous in the wet portions of the swamp, rising with their peculiar fluttering flight, and pitching down into the swamp a short distance away. Anthus australis was numerous on the drier portions, and on the rising ground the Brown Song-Larks, Cinclorhamphus cruralis, were still giving snatches of their song as they slowly flew from one Grass-tree head to another.

Amongst the dwarf bushes on the sandy rising ground Mr. Parsons flushed and wounded a Calamanthus-campestris (Gould), Field-Wren, but we could not ascertain for certain to which race it belonged; for, although several times our hands were almost upon it, it at last got away. This bird is rare in our southern districts. Next we secured a fine specimen of Hylacola canta, Rufous-rumped Ground-Wren. This was a most interesting find, for, although we are familiar with it in our dry Mallee country, none of our party had ever met with it in our wet hill country.

Mr. M'Gilp flushed two small Quails, which he supposed were *Turnix velox*, but later on we had reason to conclude that they must have been females of the King Quail. Most of the country we traversed had been burnt at no distant date, and was, therefore, unsuited to the Emu-Wren; but a small flock of these diminutive birds was located in some dense bushes growing in a small area of still swampy ground.

This was the first time that any of our party had seen the Emu-Wren on the mainland of South Australia. I believe the previous record of birds obtained from Mount Compass was more

than 30 years ago, although Capt. White and others had met with the birds in a swamp at Myponga, a continuation of somewhat similar country to the west, but on the other watershed.

In the afternoon we went a few miles further on and searched in a patch of swampy ground, with tussocks of Cutting Grass buried in Tea-tree. Almost immediately Emu-Wrens were "spotted," and, during the afternoon, several specimens were obtained. The ability of this diminutive bird to keep cover and, in spite of its long tail, to pass through the densest bushes and cutting grass at a rapid rate, makes it extremely difficult to shoot them. While after the Emu-Wrens we flushed a small dark-coloured Quail, which I felt confident was the King Quail—a bird I had not met with in this State, and last saw alive in 1886 near Cranbourne, Victoria—for, although a not uncommon bird in that State, it is an extremely rare bird in South Australia. All three of us were so astonished at the occurrence of this lovely quail that none of us attempted to shoot it.

After tea we made skins of our specimens by lamp-light, and before getting-up time we were driven from our couches to the shelter of the verandah near by heavy rain. So effectually wetted was the scrub that collecting was out of the question, and an early start was made for home. We learned from local residents that the King Quail, later in the season, come into the settlers' vegetable gardens to feed on the seeds of chickweed, and our informant promised to send us word when they put in an appearance. Early in February a message reached Mr. Parsons that the little Quail, that we believed to be King Quail, had

turned up.

We decided at once to go in search of them, and left Blackwood on the 6th by motor, in time to do some work before dark. We inspected a different swamp from that visited before, and discovered a place where there must have been scores of Emu-Wrens; for, while now I have not the least power of hearing their feeble call, Mr. Parsons' ears were very alert, he hearing the call notes of these little birds on every side—they were never far from the tussocks of cutting grass. On our return we flushed several Pigeons which, from their colour and small size, we took to be *Phaps elegans* (Brush Bronzewings).

Next morning we were out in the swamp almost at daybreak, but did not meet with much success before breakfast. After this meal we went after a Snipe, under the guidance of a young man who knew the spots it frequented; we flushed it twice, but its rapid flight was too good for us. We concluded it was

Rostratula australis, the Australian Painted Snipe.

Another locality where Emu-Wrens were very plentiful was discovered, and several specimens were shot in the dense Tea-tree

growing in water.

We learned that the King Quail had not yet come into the gardens as we supposed, but our informant had seen three birds

in a swamp three-quarters of a mile away: so, accompanied by

dogs, we set out on a hunt in that locality.

We were successful in shooting two males, and one or two females were seen by members of the party. These King Quails, Excalfactoria australis (Gould), were very difficult to flush, rising almost at one's feet, flying swiftly a short distance and dropping almost like a stone into the swamp. We were astonished at the silence of their flight—not making the whirr so typical of Quails. The coloration of this miniature Quail, especially the under side, with the black diamond, edged with white, on the chin and throat, rich chestnut abdomen on a dark lead-coloured ground colour, is simply superb. We were both delighted to get our first authentic S.A. specimens, as well as the satisfaction of proving our identification on our previous visit correct.*

We noted four species of Acanthizæ in the locality, and the

Crescent Honey-eater, which does not occur at Blackwood, was

here in great numbers.

I had brought several skins of rare birds to see if the local people knew them—amongst them the Ground-Parrot, Pezoporus terrestris (Shaw), which was recognized as having been in the district, but our informant said he had not seen it for many years. In face of the fact that we were told that the Emu-Wren had become exceedingly rare, whereas they are very numerous in suitable spots, I think it not unlikely that the Ground-Parrot is still resident there, in these wide expanses of swamps. Now this interesting locality is brought comparatively within easy reach by motor-car we shall hope to study its avifauna more closely, and expect to re-discover some others of our rare birds that have disappeared from other localities.

We saw several small flocks of Euphema elegans (Gould), the Grass-Parrot, and had met with it in numbers on the occasions of our brief earlier visits to the locality. They are evidently resident in the district throughout most of the year, and had

nested quite close to the main road this season.

Another bird that is extremely local in South Australia is the Fire-tailed Finch, Zonæginthus bellus (Latham); several were seen and one specimen obtained, also what were evidently two nests were examined by Mr. M'Gilp. It is curious how this species clings to particular spots. The small creek, with its fringe of tall bushes, where we saw it this time, was the identical spot where I had collected it a year or so ago, and the people at Mount Compass referred us to the same spot to find them.

Description of the Mount Compass Emu-Wren and Comparison with other Forms.—On my return from the December visit I noted at once the striking difference between the Mount Compass birds and the Victorian, and called my friend Capt. White's attention

^{*} In the R.A.O.U "Check-list" South Australia is included in the range of the King Quail.-EDS.

to the fact, but said I should like to see skins collected at the same season of the year from both localities, to make certain that the differences were not seasonal. I now find that some of the February skins have their new plumage, and am satisfied that the grey character of neck feathers, and the less rufous coloration generally, is a permanent and distinctive characteristic. My colleague, Mr. F. E. Parsons, tells me that he had come to the same conclusion, quite independently.

For purposes of comparison, I arranged the specimens, irrespective of locality, in order of the depth of rufous coloration

of the upper portions.

The specimen I collected in Tasmania, near Scottsdale, on 9th October, 1916, easily was first for the depth and brilliancy of rufous coloration of the upper plumage, and incidentally smaller in size than any of the others. Next in order came those I collected near Cranbourne, in Victoria, in July, 1886. The whole coloration is decidedly rufous, the male slightly more so than the female, and the forehead of male almost entirely rufous, the blackish mid-streak being almost absent. Then come the Mount Compass birds of the South Australian series, showing a considerably wider distinction between them and the Victorian than there is between the Victorian and Tasmanian races. In the males from Mount Compass, the nape and upper neck is distinctly edged with grey, the rufous coloration being practically confined to the forehead, and the black mid-streak being much more in evidence than in the Victorian and Tasmanian specimens; but in the female this distinction is still more marked—the whole of the upper portion of the head and neck is grev streaked with black, and in this respect being very similar to Mr. Parsons' new Kangaroo Island bird; but whereas in the Mount Compass birds the feathers of the wings and back are edged with pale rufous, in the Kangaroo Island skins this coloration is practically absent. A consideration of the under surfaces shows that the Tasmanian and Victorian birds are considerably deeper in rufous coloration than is the case with either of the South Australian forms.

To sum up, we have under review four easily separated forms if examined by daylight. At one end we have the Tasmanian form, with its near ally the Victorian bird; at the other end we have Mr. Parsons' Kangaroo Island bird, with its nearest ally the Mount Compass bird herein described.

The Kangaroo Island birds I consider an exceptionally distinct race, and it is very interesting to find that, while the mainland South Australian form is easily separated from the insular one, it is an intermediate race more closely related to the Kangarou

Island than to the Victorian.

I regret to say that I have no specimens of either of the Western Australian races, nor of the Mallee bird, and therefore have been unable to deal with them in the above comparisons. I am given to understand that the Mallee bird is not likely to

form a link in the chain; if this is correct, the isolation caused by the Ninety-mile Desert must account for the wide divergence of both the South Australian forms from the Victorian.

I think it best to recognize the Mount Compass birds as an intermediate variety between the Victorian and Kangaroo Island species, with closer affinity with the latter than with the former; but should it be deemed best to give sub-specific rank to this mainland bird, I suggest the name *intermedius*, of which the Mount Compass bird will be the type.

Birds referred to above:—Stipiturus malachurus littleri (Mathews), Tasmanian Emu-Wren; Stipiturus malachurus tregellasi (Mathews), Victorian Emu-Wren; Stipiturus malachurus halmaturina (Parsons), Kangaroo Island Emu-Wren; Stipiturus malachurus inter-

medius, South Australian Emu-Wren.

Notes on Parasitism.

By H. STUART DOVE, F.Z.S., WEST DEVONPORT (TAS.)

THE consideration of the parasitic habit among birds, and its origin, is to my mind one of the most absorbing in the science of ornithology, and any suggestion as to how it arose is worthy of discussion. In dipping—perhaps for the hundredth (or thousandth) time—into that delightful classic, White's "Selborne," I find that the author, in writing to Hon. Daines Barrington, in 1776, mentions that Herissant, a French anatomist. is persuaded that he has discovered the reason why Cuckoos do not hatch their own eggs: the impediment arises, he supposes, from the internal structure of their parts, which incapacitates them for incubation. According to this gentleman, the "crop or craw" lies immediately on and over the bowels, so as to make a large protuberance on the abdomen. ["Crop" here evidently means "stomach," as will be seen later; Dr. Newton excludes the Cuculidæ from crop-possessing birds.—H. S. D.] White hereupon procured a Cuckoo, and, cutting open the sternum and exposing the interior, found the "crop" lying as mentioned. "This stomach was large and round, and stuffed hard like a pincushion with food, small scarabs, spiders, dragon-flies, maggots, and small seeds, so that these birds apparently subsist on both insects and fruits." White, although he considered the Frenchman was right in thinking this round, hard stomach would make "a very uneasy situation during the process of incubation," yet, with true scientific caution, procured another bird, a Fern Owl or Caprimulgus, "which, from its habit and shape, we suspected might resemble the Cuckoo in internal construction." So it proved; "the 'crop or craw' lay immediately upon the viscera, between them and the skin of the belly, and was stuffed hard with large moths and their eggs, which had no doubt been forced out of them by the act of swallowing." As the Fern Owl was well